

## **National Ground-Water Monitoring Network**

### **Tip Sheet on Minimum Data Requirements for Candidate sites**

A minimum set of data elements is required in the NGWMN Framework Document. Some fields are stored in agency databases and others are entered directly into a table in the Portal database which contains Site information called the 'Well Registry'. In the list of data elements, the parenthesis after the field specifies where the data reside. Data element definitions can be found in the NGWMN Data Dictionary (<https://cida.usgs.gov/ngwmn/doc/DataDictionary.pdf>).

- (R) Populated in NGWMN Well Registry
- (C) Construction database, linked to using web services
- (WL) Water-Level database, linked to using web services
- (WQ) Water-quality database, linked to using web services or from EPA STORET
- (L) Lithology database, linked to using web services

#### **All Sites**

- Agency Identifier; agency that is providing the data (R)
- Site Number (R, C, WL, WQ, L) – This is the database key and must be unique. It must be alphanumeric and must not contain spaces or special characters.
- Site Name (R) – This should be a human readable name that is unique. It should be reviewed so that no Personally Identifiable Information (PII) is present.
- Country (R)
- State (R)
- County (R)
- Latitude and Longitude with Metadata
  - Latitude (decimal degrees) (R)
  - Longitude (decimal degrees) (R)
  - Horizontal Datum (R)
  - Horizontal Location Method (R)
  - Horizontal Location Accuracy (R)
- National Aquifer Code (R)
- Local Aquifer Code (R)
- Site Type; Well/Spring (R)
- Aquifer Confinement Status; Confined/Unconfined (R)
- Lithology (L)
  - Lithology ID (L)
  - Description of Lithology of the unit (L)
  - Observation Method (L)
  - Beginning Depth of Lithologic Unit (L)
  - Ending Depth of Lithologic Unit (L)

- Well Construction Information
  - Land Surface Altitude (R)
  - Vertical Datum (R)
  - Well Depth (R)
  - Well Depth Units (R)
  - Beginning Depth of Casing Interval (C)
  - Ending Depth of Casing Interval (C)
  - Depth of Casing Interval Unit of Measure (C)
  - Casing Interval Material (C)
  - Beginning Depth of Screen Interval (C)
  - Ending Depth of Screen Interval (C)
  - Depth of Screen Interval Unit of Measure (C)
  - Screen Interval Material (C)

#### Water-level Sites

- Land surface altitude with Metadata (R)
  - Altitude Units (R)
  - Altitude Accuracy (R)
  - Method of altitude measurement (R)
- Water-Level data
  - Date/Time/Time Zone of water-level measurement (WL)
  - Depth to Water (WL)
  - Water-level units (WL)
  - Method of water-level measurement (WL)
  - Accuracy of water-level measurement (WL)

#### Water-Quality Sites

- Water-Quality data
  - Date/Time/Time Zone of sample (WQ)
  - Characteristic Name (WQ)
  - Value (WQ)
  - Unit of Measure (WQ)
  - Sample Fraction (WQ)
  - Chemical Identification Number (WQ)
  - Chemical Classification System (WQ)
  - Analytical Method Identifier (WQ)
  - Analytical Method Name (WQ)
  - Analytical Method Context (WQ)

### Reference

Subcommittee on Ground Water of the Advisory Committee on Water Information, 2009 (revised 2013), A national framework for ground water monitoring in the United States: Advisory Committee on Water Information, accessed October 23, 2013, at [http://acwi.gov/sogw/ngwmn\\_framework\\_report\\_july2013.pdf](http://acwi.gov/sogw/ngwmn_framework_report_july2013.pdf).